#32
3-27-03

DECLARATION OF YASUMICHI HITOSHI UNDER 37 C.F.R. §1.131 Address to: Assistant Commissioner for Patents Washington, D.C. 20231	Application Number	09/135,238
	Confirmation Number	9052
	Filing Date	August 17, 1998
	First Named Inventor	Garry P. Nolan
	Examiner	Ram R. Shukla
	Group Art	1632
	Attorney Docket No.	RIGL-001

This Declaration with the attached Exhibits are being submitted in conjunction with the Applicants' Response to the Office Action dated November 6, 2002.

I, Yasumichi Hitoshi, M.D., Ph.D., do hereby declare as follows.

1. I am an inventor of the invention claimed in the above captioned application, along with Dr. Gary Nolan.

2. I have been asked to declare and provide factual evidence in support of a reduction to practice of our anti-TOSO antibodies prior to August 25, 1997.

3. Prior to August 25, 1997, we made antibodies that specifically bound to TOSO from chicken and rabbit. Dr. Nolan and I contracted Lampire Biological, to make these antibodies. Lampire Biological immunized chickens and rabbits with TOSO polypeptide and provided us with polyclonal antisera containing anti-TOSO antibodies.

4. As evidenced below, we reduced to practice anti-TOSO antibodies prior to August 25, 1997. Evidence is provided by Exhibits A and B. The dates have been redacted from these exhibits. All redacted dates are prior to August 25, 1997.

5. Exhibit A consists of a dated fax sent from Lampire Biological regarding chicken antibodies. Page 2 of the fax shows the results of several ELISA assays using six dilutions of antibodies from three chickens (CK #3052, CK #3053, and CK #3054). The results are shown in a graph and in the table. Each of the antibody preparations show high affinity binding to the TOSO antigen. The titer of the anti-TOSO antibodies is 9,000, 60,000 and 20,000. These results are compared to the results obtained using pre-immune serum from the same three chickens, shown in the graph and table on page 3 of the fax. There are no TOSO-specific antibodies in the pre-immune serum of these chickens. The fax is dated prior to August 25, 1997.

6. Exhibit B consists of a dated printout from a Beckman DU-600 spectrophotometer showing the optical absorbance of three rabbit antibody preparations at a 1 in 10 dilution, and an autoradiograph of a Western blow using the same rabbit antibody preparations (top panel) and the three chicken antibody preparations described in Exhibit A (bottom panel). In these experiments, a pair of cell lysate samples was decorated with each antibody preparation. One cell lysate (represented by the lane marked "J") was from Jurkat cells, and the other cell lysate (represented by the lane marked "4.8") was Jurkat cells expressing recombinant TOSO. Differences in banding patterns were observed between each of the samples for each of the antibodies. In particular, bands at approximately 60 kDa (the same size as TOSO), were observed in lysates of Jurkat cells expressing recombinant TOSO, but not in normal Jurkat cells. The spectrophotometer printout is dated prior to August 25, 1997.

7. The evidence provided in Exhibits A and B establishes that we produced chicken and rabbit antibodies that specifically bind TOSO prior to August 25, 1997.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: 3/6/03

Yasumichi Hitoshi, M.D., Ph.D.

Attachments: Exhibits A and B